



State of Ohio Environmental Protection Agency

**Southwest District Office**

401 East Fifth Street  
Dayton, Ohio 45402-2911  
(513) 285-6357  
FAX (513) 285-6249

17 JUL 97 1:42

5400.115  
File  
OEPA Correspond

George V. Voinovich  
Governor

July 17, 1997

RE: DOE MOUND  
OUT AUTHORIZATION  
TO DISCHARGE

Arthur Kleinrath  
US DOE MEMP  
P.O. Box 66  
1 Mound Road  
Miamisburg, Ohio 45343-0066

Dear Mr. Kleinrath:

The purpose of this correspondence is to inform you that the Ohio Environmental Protection Agency (Ohio EPA) Office of Federal Facilities Oversight (OFFO) has received a final copy of the Operable Unit 1 Authorization to Discharge from Ohio EPA's Division of Surface Water. It is OFFO's understanding that this Authorization has been submitted to DOE Mound under separate cover, and will become effective August 1, 1997.

As per section G. Special Conditions, item 2, page 6 of 11 of the Authorization, the monitoring data required is to be reported monthly to the Division of Surface Water, Columbus, Ohio. OFFO would appreciate being courtesy copied on this reporting if at all possible.

If there are any questions or comments concerning the Authorization or this request, please contact me at (937) 285-6468 or Kathy Lee Fox of my staff at (937) 285-6441.

Sincerely,

Brian Nickell  
Mound Project Manager  
Office of Federal Facilities Oversight

**Enclosure**

cc: T. Fischer, USEPA  
R. Church, DOE MEMP  
K. Hacker, EG&G  
R. Paulick, EG&G

**w/o Enclosure**

cc: M. Gilliat, EG&G  
D. Draper, EG&G  
D. Rakel, EG&G  
M. Williams, EG&G



RECEIVED  
OHIO EPA

JUL 14 1997

SOUTHWEST DISTRICT

Page 1 of 11

Issue Date: July 11, 1997

Effective Date: August 1, 1997

**AUTHORIZATION TO DISCHARGE**

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

U.S. Department of Energy  
Mound Remediation Site  
(Authorization No. 1IN90010\*AD)

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from the groundwater treatment works located at 1 Mound Road, Miamisburg, Ohio, Montgomery County

In accordance with the antidegradation rule, OAC 3745-1-05, I have determined that a lowering of water quality in Mound Overflow Creek and subsequently the Great Miami River is necessary. Provision (D)(1)(e) was applied to this application. This provision excludes the need for the submittal and subsequent review of technical alternatives and social and economic issues related to the degradation. Other rule provisions, however, including public participation and appropriate intergovernmental coordination were required and considered prior to reaching this decision.

**A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

U.S. Department of Energy Mound Remediation Site is authorized to discharge in accordance with the following limitations and monitoring requirements from the ground water treatment works (outfall 11N90010003), beginning on the first day of authorized discharge and lasting until these requirements are modified. See Paragraph D for a description of the required sampling station location.

EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS (1)				MONITORING REQUIREMENTS	
Reporting Code	Units	Parameter	Concentration Specified Units		Loading* kg/day		Meas. Freq.	Sample Type
			30 day	Daily	30 day	Daily		
00300	mg/l	Dissolved Oxygen	-	-	-	-		
00530	mg/l	Total Suspended Solids	30	45	-	-	1/Week	Grab
00981	µg/l	Selenium, Total Recoverable	-	-	24.5	36.8	1/2 Weeks	24 Hr. Composite
01079	µg/l	Silver, Total Recoverable	-	-	-	-	1/Month	24 Hr. Composite
32102	µg/l	Carbon Tetrachloride	-	-	-	-	1/Month	24 Hr. Composite
32106	µg/l	Chloroform	5	10	0.0041	0.0082	1/Month	Grab
34423	µg/l	Methylene Chloride	5	10	0.0041	0.0082	1/Month	Grab
34475	µg/l	Tetrachloroethylene	5	10	0.0041	0.0082	1/Month	Grab
34488	µg/l	Trichlorofluoromethane	5	10	0.0041	0.0082	1/Month	Grab
34506	µg/l	1,1,1-Trichloroethane	5	10	0.0041	0.0082	1/Month	Grab
34546	µg/l	1,2-trans-Dichloroethylene	5	10	0.0041	0.0082	1/Month	Grab
50050	MGD	Flow Rate	-	-	0.0041	0.0082	1/Month	Grab
39100	µg/l	Bis(2-ethylhexyl) Phthalate	-	-	-	-	Daily	24 Hr. Total
39175	µg/l	Vinyl Chloride	-	-	-	-	Quarterly	24 Hr. Composite
39180	µg/l	Trichloroethylene	5	10	0.0041	0.0082	1/Month	Grab
46363	µg/l	Cis-1,2-Dichloroethylene, Total	5	10	0.0041	0.0082	1/Month	Grab
61425	TUa	Acute Toxicity, <u>Ceriodaphnia dubia</u>	-	1.0	-	-	1/Month	Grab
61426	TUc	Chronic Toxicity, <u>Ceriodaphnia dubia</u>	-	1.0	-	-	Quarterly	See Item C.
61427	TUa	Acute Toxicity, <u>Pimephales promelas</u>	**	-	-	-	Quarterly	See Item C.
61428	TUc	Chronic Toxicity, <u>Pimephales promelas</u>	-	1.0	-	-	Quarterly	See Item C.
70301	mg/l	Solids, Dissolved-Sum of	**	-	-	-	Quarterly	See Item C.
80082	mg/l	CBOD <sub>5</sub>	-	-	-	-	1/2 Weeks	24 Hr. Composite
99983	µg/l	Zinc, Total	-	-	-	-	1/Month	24 Hr. Composite
99984	µg/l	Nickel, Total Recoverable	-	-	-	-	1/2 Weeks	24 Hr. Composite
99985	µg/l	Chromium, Total	-	-	-	-	1/2 Weeks	24 Hr. Composite
99988	µg/l	Lead, Total Recoverable	1100	9800	0.90	8.0	1/Week	24 Hr. Composite
99989	µg/l	Copper, Total Recoverable	-	-	-	-	1/2 Weeks	24 Hr. Composite
99992	µg/l	Mercury, Total Recoverable***	65	120	0.053	0.098	1/Week	24 Hr. Composite
			.023	2.2	.000019	0.0018	1/Week	24 Hr. Composite

\* Effluent limitations have been established using a flow value of 0.216 MGD.

\*\* See Item C.

\*\*\* See Item B.

(1) Effluent limits on this page are applicable when effluent flows are less than or equal to 0.216 MGD. Report all data under outfall 11N90010003 when effluent flows are less than or equal to 0.216 MGD. When flows are greater than 0.216 MGD, report all data under outfall 11N90010043.

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

**A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

U.S. Department of Energy Mound Remediation Site is authorized to discharge in accordance with the following limitations and monitoring requirements from the ground water treatment works (outfall 11N90010043), beginning on the first day of authorized discharge and lasting until these requirements are modified. See Paragraph D for a description of the required sampling station location.

EFFLUENT CHARACTERISTIC			DISCHARGE LIMITATIONS (1)				MONITORING REQUIREMENTS	
Reporting Code	Units	Parameter	Concentration Specified Units		Loading* kg/day		Meas. Freq.	Sample Type
			30 day	Daily	30 day	Daily		
00300	mg/l	Dissolved Oxygen	-	-	-	-	1/Week	Grab
00530	mg/l	Total Suspended Solids	30	45	49.1	73.6	1/2 Weeks	24 Hr. Composite
00981	µg/l	Selenium, Total Recoverable	-	-	-	-	1/Month	24 Hr. Composite
01079	µg/l	Silver, Total Recoverable	-	-	-	-	1/Month	24 Hr. Composite
32102	µg/l	Carbon Tetrachloride	5	10	.0082	.016	1/Month	Grab
32106	µg/l	Chloroform	5	10	.0082	.016	1/Month	Grab
34423	µg/l	Methylene Chloride	5	10	.0082	.016	1/Month	Grab
34475	µg/l	Tetrachloroethylene	5	10	.0082	.016	1/Month	Grab
34488	µg/l	Trichlorofluoromethane	5	10	.0082	.016	1/Month	Grab
34506	µg/l	1,1,1-Trichloroethane	5	10	.0082	.016	1/Month	Grab
34546	µg/l	1,2-trans-Dichloroethylene	5	10	.0082	.016	1/Month	Grab
50050	MGD	Flow Rate	-	-	-	-	Daily	24 Hr. Total
39100	µg/l	Bis(2-ethylhexyl) Phthalate	-	-	-	-	Quarterly	24 Hr. Composite
39175	µg/l	Vinyl Chloride	5	10	.0082	.016	1/Month	Grab
39180	µg/l	Trichloroethylene	5	10	.0082	.016	1/Month	Grab
46363	µg/l	Cis-1,2-Dichloroethylene, Total	5	10	.0082	.016	1/Month	Grab
61425	TUa	Acute Toxicity, <u>Ceriodaphnia dubia</u>	-	1.0	-	-	Quarterly	See Item C.
61426	TUc	Chronic Toxicity, <u>Ceriodaphnia dubia</u>	**	-	-	-	Quarterly	See Item C.
61427	TUa	Acute Toxicity, <u>Pimephales promelas</u>	-	1.0	-	-	Quarterly	See Item C.
61428	TUc	Chronic Toxicity, <u>Pimephales promelas</u>	**	-	-	-	Quarterly	See Item C.
70301	mg/l	Solids, Dissolved-Sum of	-	-	-	-	1/2 Weeks	24 Hr. Composite
80082	mg/l	CBOD <sub>5</sub>	-	-	-	-	1/Month	24 Hr. Composite
99983	µg/l	Zinc, Total	-	-	-	-	1/2 Weeks	24 Hr. Composite
99984	µg/l	Nickel, Total Recoverable	-	-	-	-	1/2 Weeks	24 Hr. Composite
99985	µg/l	Chromium, Total	1090	9275	1.78	15.2	1/Week	24 Hr. Composite
99988	µg/l	Lead, Total Recoverable	-	-	-	-	1/2 Weeks	24 Hr. Composite
99989	µg/l	Copper, Total Recoverable	64	106	0.10	0.173	1/Week	24 Hr. Composite
99992	µg/l	Mercury, Total Recoverable***	0.017	2.1	.000028	0.0034	1/Week	24 Hr. Composite

\* Effluent limitations have been established using a flow value of 0.432 MGD.

\*\* See Item C.

\*\*\* See Item B.

(1) Effluent limits on this page are applicable when effluent flows are greater than 0.216 MGD. Report all data under outfall 11N90010043 when effluent flows are greater than 0.216 MGD. When effluent flows are less than or equal to 0.216 MGD, report all data under outfall 11N90010003.

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.

- B. The parameters listed below have had effluent limitations established that are below the OEPA Practical Quantification Level (OEPA PQL) for the 40 CFR 136 promulgated analytical procedure for those parameters. In accordance with ORC Section 6111.13, if a discharge limit is set below the OEPA PQL, any analytical result reported equal to or less than the OEPA PQL shall be considered to be in compliance with that limit.

REPORTING:

All analytical results, even those below the OEPA PQL, (listed below), shall be reported. Analytical results are to be reported as follows:

1. Results above the PQL: Report the analytical result for the parameter of concern.
2. Results above the MDL, but below the PQL: Report the analytical result, even though it is below the PQL.
3. Results below the MDL: Analytical results below the method detection limit shall be reported as "below detection" using the reporting code "AA".

The following table will be used to determine compliance with the authorization limit:

<u>Parameter</u>	<u>PQL</u>
Mercury	1.0 µg/l

C. Biomonitoring Program Requirements

Compliance Monitoring Program

As soon as possible, but not later than three months after the start of the discharge, the USDOE/Mound shall initiate an effluent biomonitoring program to evaluate compliance with the whole effluent toxicity limits of 1.0 TU<sub>a</sub> outfall 11N90010003.

If the Ohio EPA promulgates rules in the Ohio Water Quality Standards (OAC 3745-1) that specifically designate Mound Overflow Creek as "Warmwater Habitat", "Modified Warmwater Habitat" or "Exceptional Warmwater Habitat", the remediation site discharge must meet the chronic toxicity limits listed below: If the discharge from Outfall 11N90010003 does not meet these limits at the time such a rule is promulgated, this discharge authorization may be modified to include a schedule of compliance to meet the following chronic toxicity limits: for outfall 11N90010003: 2.8 TU<sub>c</sub>; for outfall 11N9001043: 1.9 TU<sub>c</sub>.

General Requirements

All toxicity testing conducted as required by this authorization shall be done in accordance with Reporting and Testing Guidance for Biomonitoring Required by the Ohio Environmental Protection Agency (hereinafter, the "biomonitoring guidance"), Ohio EPA, 1991 (or current revision). The Standard Operating Procedures (SOP) or verification of SOP submittal, as described in Section 1.B. of the biomonitoring guidance, shall be submitted no later than three months after the effective date of this authorization. If the laboratory performing the testing has modified its protocols, a new SOP is required.

C. Continued

Testing Requirements

1. Chronic Bioassays

The USDOE/Mound shall conduct quarterly chronic toxicity tests using *Ceriodaphnia dubia* and fathead minnows (*Pimephales promelas*) on effluent samples from outfall 1IN90010003/1IN90010043 except that bimonthly (6 tests per year) shall be conducted during the first year of this authorization to discharge.

These tests shall be conducted as specified in Section 3 of the biomonitoring guidance. Acute endpoints, as described in Section 2.H. of the biomonitoring guidance, shall be determined from the chronic test results.

2. Data Review

Following completion of each bioassay monitoring requirement, USDOE/Mound shall report results of the tests in accordance with Sections 3.H.1. and 3.H.2.b. of the biomonitoring guidance. Ohio EPA will evaluate the results in order to judge compliance with the whole effluent toxicity limitations of 1.0 TU<sub>a</sub> and 2.8 TU<sub>c</sub> at outfall 1IN90010003 or limits of 1.0 TU<sub>a</sub> and 1.9 TU<sub>c</sub> at outfall 1IN90010043. In addition, this authorization may be modified to require additional biomonitoring or to require further investigation of toxicity.

b. Definitions

$$TU_a = \text{Acute Toxic Units} = \frac{100}{LC50} \text{ or } \frac{100}{EC50}$$

$$TU_c = \text{Chronic Toxic Units} = \frac{100}{\text{square root of NOEC} \times \text{LOEC}}$$

- D. Samples (outfall 1IN90010003/1IN90010043) of treated ground water shall be taken at the final discharge of the air stripper prior to discharge to the Mound Overflow Creek.
- E. At least one month before authorized discharge begins, the entity shall notify the NPDES Permits Section, Division of Surface Water, Ohio EPA Southwest District Office, and the Office of Federal Facilities Oversight, Southwest District Office, of the starting date of discharge.
- F. Effluent limitations may be revised in order to meet water quality standards after a stream use determination and wasteload allocation is complete and approved. These limitations and discharge requirements may be modified to comply with any applicable water quality effluent limitations. A re-examination of discharge limits will be necessary in the event of a change in discharge duration.

G. SPECIAL CONDITIONS

1. The effluent shall, at all times, be free of substances:
  - a. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;
  - b. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;
  - c. In amounts that will alter the natural color, or odor of the receiving water to such degree as to create a nuisance;
  - d. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;
  - e. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growths become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;
  - f. In amounts that will impair designated instream or downstream water uses.
2. Monitoring data required by this document shall be reported on a monthly basis to the Ohio EPA, Division of Surface Water, Permit Compliance Unit, PO Box 1049, Columbus, Ohio 43266-1049. Individual reports for each month are to be received no later than the 15th of the next month.
3. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures For the Analysis of Pollutants" or other USEPA approved methods unless otherwise specified in this authorization. USDOE/Mound shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to insure accuracy of measurements.

4. DEFINITIONS

"daily load limitations" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.

"daily concentration limitation" means the arithmetic average (weighted by flow) of all the determinations of concentration made during the day. If only one sample is taken during the day, its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"30-day load limitation" is the total discharge by weight during any 30-day period divided by the number of days in the 30-day period that the facility was in operation. If only one sample is taken in a 30-day period, the weight of pollutant discharge calculated from it is the 30-day load. If more than one sample is taken during one 30-day period, the 30-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 30-day period and dividing by the number of days sampled.

G.4. Continued

"30-day concentration limitation" means the arithmetic average (weighted by flow) of all the determinations of daily concentration made during the 30-day period. If only one sample is taken during the 30-day period, its concentration is the 30-day concentration for that 30-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"Bypass" Means the intentional diversion of waste streams from any portion of the treatment facility.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

5. FACILITY OPERATION AND QUALITY CONTROL

All groundwater treatment works shall be operated in a manner consistent with the following:

- a. At all times, the USDOE/Mound shall maintain in a good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the USDOE/Mound necessary to achieve compliance with the terms and conditions of this authorization. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a USDOE/Mound only when the operation is necessary to achieve compliance with conditions of the authorization.
- b. The USDOE/Mound shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.
- c. Maintenance of groundwater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by the Ohio EPA as specified in the Paragraph in Item G.8 entitled UNAUTHORIZED DISCHARGES.



G. Continued

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this authorization, USDOE/Mound shall record the following information:

- a. The exact place and date of sampling; (time of sampling not required on EPA 4500)
- b. The person(s) who performed the sampling or measurements;
- c. The date the analyses were performed on those samples;
- d. The person (s) who perform the analyses;
- e. The analytical techniques or methods used; and
- f. The results of all analyses and measurements.

7. RIGHT OF ENTRY

The entity shall allow authorized representatives of the Ohio EPA and U.S. EPA upon presentation of credentials:

- a. To enter upon the entity's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions contained herein; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions contained herein; to inspect any monitoring equipment or monitoring method required herein; and to sample for any pollutants.
- c. To enter upon the entity's premises to inspect at reasonable times any collection, treatment, pollution management, or discharge facilities required herein.

8. UNAUTHORIZED DISCHARGES

- a. Unless specifically authorized, deliberate by-passing or diverting of groundwater from the treatment works is prohibited except when necessary:
  1. To prevent loss of life, personal injury, or severe property damage;
  2. To prevent damage to treatment works or processes; or
  3. To allow essential maintenance to be performed according to a schedule approved in writing by the Ohio EPA Southwest District Office.
- b. While typical unauthorized discharges are those resulting from pipeline breaks, equipment malfunctions or failures, operator errors, accidents, process interruptions, or power failures, all unauthorized discharges shall be reported according to the following procedures.
  1. Report within twenty four (24) hours of discovery to Ohio EPA by calling (toll free) 1-800-282-9378

G.8. Continued

2. For these telephone reports, the following must be included:
  - a. the times at which the discharge occurred and was discovered;
  - b. the approximate amount and the characteristics of the discharge;
  - c. the stream (s) affected by the discharge;
  - d. the circumstances which created the discharge;
  - e. the names and telephone numbers of the persons who have knowledge of these circumstances;
  - f. what remedial steps are being taken; and
  - g. the names and telephone number of the persons responsible for such remedial steps.
3. These reports shall be confirmed in writing within five days the discharge and submitted to the Ohio EPA Southwest District Office. This report should include the information required under NONCOMPLIANCE NOTIFICATION.

9. NONCOMPLIANCE NOTIFICATION

a. Effluent Limitations:

If the entity is unable to meet any effluent limitations specified herein, the entity shall submit a written report to the Ohio EPA Southwest District Office within five days of becoming aware of the conditions. The report shall include the following:

1. The limitation(s) which has been violated;
2. The extent of the violation(s);
3. The cause of the violation(s);
4. The period of the violation(s) including exact dates and times;
5. If uncorrected, the anticipated time the violation(s) is expected to continue; and
6. Steps being taken to reduce, eliminate and/or prevent recurrence of the violation(s).

10. ADVERSE IMPACT:

In the event of either an unauthorized discharge or a violation of effluent limitations, the entity shall take all reasonable steps to minimize or correct any adverse impact on the environment. This may include accelerated or additional monitoring to determine the extent of the impact of unauthorized discharge or the violation of limitations. If such additional monitoring is performed, the data collected shall be included in a written report submitted to the Ohio EPA Southwest District Office.

G. Continued

11. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this authorization. The discharge of any pollutant identified in this authorization more frequently than, or at a level in excess of, that authorized in Paragraph A, "Final Effluent Limitations and Monitoring Requirements for the U.S. Department of Energy Mound Remediation Site" shall constitute a violation of the terms and conditions contained herein.

12. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable.

- a. For all treatment works, any significant change in character of the discharge which USDOE/Mound knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. USDOE/Mound shall give advance notice to the Director of any planned changes in the authorized facility or activity which may result in noncompliance with authorization requirements. Notification of authorization changes or anticipated noncompliance does not stay any authorization condition.
- b. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

13. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this authorization shall be construed to preclude the institution of any legal action or relieve USDOE/Mound from any responsibilities, liabilities, or penalties to which USDOE/Mound is or may be subject under Section 311 of the Act.

14. STATE LAWS AND REGULATIONS

Nothing in this authorization shall be construed to preclude the institution of any legal action nor relieve USDOE/Mound from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.

15. RECORDS RETENTION

The USDOE/Mound shall retain all the following records for the groundwater treatment works for a minimum of three years, including:

- a. All sampling and analytical records (including internal sampling data not reported);
- b. All original recordings for any continuous monitoring instrumentation;
- c. All instrumentation, calibration and maintenance records;
- d. All treatment works operation and maintenance records;
- e. All reports required by this authorization; and

G. Continued

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three year period for retention of records shall start from the date of sample, measurement, report, or application.